

The improvement of the UI and UX of a mobility App based on the feasible functional and technical developments of the company

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Topic

Identifying relevant functional and technical developments to improve the user interface and user experience of electric vehicle sharing App by proposing feasible solutions introduced by those identified developments.

Background Information

GoodMoovs is a company that wants to change the mobility behavior of people in such a way that it accelerates the transition to sustainable electric mobility. They provide access to shared electric vehicles through their mobile application (App) and assist the user in operating electric vehicles. The company finds it important to keep improving their service (Bongers, 2019). They are aware of different developments taking place in the electric mobility industry and want to investigate the opportunities new developments provide for their service (GoodMoovs, 2020). Currently, the company is developing a new design for their App. This gives them the opportunity to integrate new relevant functional and technical developments which contribute to the improvement of the user interface and user experience of the App (E. Bongers, personal communication, 2020). However, the company has yet to determine which developments are relevant for the App and how these developments would function in an app context.

Objective

The objective of the research was to provide the company with insights and solutions into how to improve the user interface and user experience of the App. The research focuses on identifying relevant functional and technical developments and how these developments can be effectively implemented into the App such that they contribute to the improvement of the user experience. The objective has been expressed in the research question: *What is a feasible UI/UX redesign of the GoodMoovs App that considers the technical and functional developments of the company?*

Approach

Company documents and background literature gave insight into the different developments. Relevant developments have been selected and further analyzed through a SWOT analysis and a function analysis. Opportunities and functional requirements have been discovered this way. A function comparison framework has been developed which compared the functional requirements of the development between the development and with the current GoodMoovs App to identify the most relevant and feasible development. The functional requirements of this development have been combined with the user requirements to establish the list of requirements for the development of the redesign. The user requirements have been established parallel to the function comparison. Company documents and meetings gave insight into the user needs, which were translated by using theory on user experience design into user requirements. Based on the list of requirements, concepts were developed from which the most effective ones were selected. The selected solutions were further developed such that they could be integrated into the existing redesign of the App provided by the company.

Results

From the function comparison two developments have been found as the most relevant and feasible developments for the App. They showed equal relevance and high flexibility for the company. Four concepts per development were developed showing different solutions for the integration into the App. From these eight concepts, three were selected through the validation against the list of requirements. The three chosen concepts were further developed in such a way that they could be combined and integrated into the existing redesign of the App. The result of the design process was a prototype which facilitates an increase in the guarantee for mobility; an increases in the utilization of the vehicles; streamlines the charging experience and exposes more people to the company brand to increase the companies impact on mobility behavior.

Limitations

The company had not yet fully defined all the developments which led to making assumptions about how the development would function in an app context. There was more unknown information than initially thought which shifted the focus of the research to revealing opportunities and potential solutions these developments would provide for the company. The user requirements were based on company documentation, therefore being indirect needs. The developed prototype should be tested with real users to validate the choices made during the process and revealing the direct needs of the user. User testing was not possible due to certain circumstances from the company side.

Conclusions

Relevant technical and functional developments have been identified for which feasible solutions have been developed that can be integrated into the existing redesign of the App and the same time contributing to the improvement of the user interface and the user experience. The solutions proposed is a solution. It was revealed that the company still needs to make concrete choices on the functionalities they want to integrate into their future App before continuing to further develop the new design. This research supports in making these choices and provides insight and tools in doing so. After having made these choices the proposed solution should be revisited, adjusted and tested with the user.

References

Bongers, E. (2019). *GoodMoovs Business Plan 4.1*. GoodMoovs. Confidential document with sensitive information to internally communicate the strategy of the company.

Bongers, E. (2020). *Various company meetings—Appendix 7* [Personal communication].

GoodMoovs. (2020). *RoadMap GoodMoovs (English)*. Confidential document which internally communicates the next step in the further development of GoodMoovs and the current projects GoodMoovs is working on.